#### DOCUMENT RESURE

ED 098 298

CE 002 358

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TITLE

Adult Education and Training in the Netherlands: An Estimate of the Volume and Costs of All Forms of

Adult Education.

INSTITUTION

Amsterdam Univ. (Netherlands). Kohnstamm-Institute

for Educational Research.

PUB DATE

NOTE

May 74 36p.

EDRS PRICE

MF-\$0.75 HC-\$1.85 PLUS POSTAGE

DESCRIPTORS

\*Adult Education; \*Adult Programs; \*Adult Students;
Age Differences; \*Continuous Learning; Educational
Pinance; Females; Foreign Countries; Males; National
Surveys; Tables (Data); \*Vocational Education; Womens

Education

IDENTIFIERS

\*Netherlands

#### ABSTRACT

The report is an attempt to provide a comprehensive survey of organized education/training for adults in the Netherlands. Since the Dutch Government needs to develop more complete information on adult education, figures represented in the report are rough estimates. Vocational education/training is the most important part of adult education in the Netherlands; tables indicate estimated numbers of men and women engaged in: part-time education, apprenticeships, unemployment retraining, employer-funded vocational courses, correspondence education, teacher-training, and Government employee training. Tables, likewise, provide estimates of numbers of people participating in nonvocational education -- general education, television courses, and "liberal" adult education. It is estimated that about 12 percent of the total population aged 15 and over is participating in adult education with the majority being in the 15-30 years age group. About a quarter to a third of enrollees in part-time vocational and nonvocational education are women; female participation in the young workers' educational institutes is about 60 percent. Estimates of expenditures for each type of education or training are summarized. Approximately 1 percent of the total 1974 government expenditure is for adult education while 23 percent is allotted for formal full-time education. (EA)

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KOHNSTAMM-INSTITUTE FOR EDUCATIONAL RESEARCH UNIVERSITY OF AMSTERDAM

Keizersgracht 73 - Amsterdam - C.

# Adult Education and Training in the Netherlands

An Estimate of the Volume and costs of all forms of Adult Education.

Hans Lington,

May 1974.

US DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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### I. Introduction

This report is an attempt to give a comprehensive survey of all forms of organised education and training for adults, after the period of compulsory education.

During the last few years the development of educational provisions, which guarantee equal opportunities for everyone, has been undertaken in many countries. The common purpose of all these endeavors is to reduce the gap between the opportunities now given to the young people and those from which the clder generation has benefited. This is in order to increase educational and social equality, with the underlying reasoning that in a rapidly changing society "Learning is necessary throughout life, not only for the select few, but for all" 1) Whether these systems are called "permanent education", "Lifelong learning", "recurrent education" or "second-chance education" is not important in this paper.

In 1971 also the Dutch Government started to subsidize several experimental projects aiming at clarifying the concept of permanent education and to identify the possibilities for its practical realisation 2)

This year a few experimental comprehensive schools (age 11-16 years) will start. More and more universities provide the opportunity to attend evening-lectures in some of their faculties (mainly law, economy, and training for secondary school teaching certificates).

The Correspondence Education Act of 1972 was designed to exercise supervision over the quality of courses and teachers and enables the Government to prohibit institutions, which do not meet adequate requirements.

<sup>2)</sup> See for an evaluative report of these experiments: Van Der Velde, J. De start van de experimenten "Education Permanente" NCVO, Amersfoort, 1972, vormingswerkcahier nr. 9



<sup>1)</sup> See: Kallen, D. Recurrent Education, OECD, Paris, 1973

The Kohnstamm-insitute for Educational Research now runs a project on causes of preliminary drop-out in correspondence education.

Also industry now recognizes the need of more and better vocational training for adults. Some big industries have started evaluative research of vocational courses given outside their walls. In 1973 the Committee for Increasing Productivity of the Social Economic Council charged the G.I.T.P. x) with a research project on the 'Retraining of adults by means of internal employerfunded vocational courses" 2), which is still in progress. What Maureen Woodhall in her report "Adult education in The United Kingdom" 3) says about the distribution of educational facilities is nearly fully applicable to the Dutch situation. It is andeed very difficult to obtain a comprehensive survey of current distribution of resources between adults and youth, because so little statistical information on education and training for adults is available.

The existing official statistics of the CBS (Netherlands Central Bureau of Statistics) cover only part-time education, apprentice-shipschemes and young workers's educational institutes as fas as they are state-aided and the participation in correspondence education, as fas as the correspondence colleges are accredited by the Inspection for correspondence Education.

For the rest of education and training for adults, which is provided by hundreds of different institutions and organisations, there are no current statistics at all.

From 1936 till 1938 there existed statistics on courses provided by the trade-unions (about 12.000 participants) and from 1935 till 1965 statistics on participation in Leople's Universities (about 300.000 in 1956 and 180.000 in 1965).

<sup>\*)</sup> Combined Institute for Applied Psychology.



<sup>1)</sup> Documentation and Evaluation of External Training Facilities (D.E.E.O.), Philips Eindhoven, Soc. Zaken, afd. Opleidingen. (final results will be available in 1975.)

<sup>2)</sup> Janmaat, J.F.J., et al. Onderzoek om- en bijscholing van volwassenen middels interne bedrijfsopleidingen (verslag van de eerste inventariserende fase), Berg en Dal, G.I.T.P., 1973.

<sup>3)</sup> Woodhall, M., Adult Education and Training in the U.K., OECD, Paris. 1973.

In 1970 the adult-education department of the Ministry of Culture, Recreation and Social Work started a working-group, together with the NCVO (Dutch Centre for Adult Education) and the CBS, on developing a comprehensive statistic of adult education.

As a result, this year (1974) statistics on residential centres start running, providing data on numbers, origin, sex and age of participants and types of courses.

Though this is a promising development, there are still big gaps in the information on adult education, especially in the field of vocational education and training in industry.

As far as the cost of adult education is concerned, accurate statistics don't exist either. Therefore the figures, given in this paper, are based on very rough estimates, or even guesses, because there were no better estimates.

If the Dutch Government is seriously interested in increasing "second-chance education" or "permanent education", a first priority must be to obtain more complete information about current provisions of educational facilities.

#### Definitions

As far as possible those definitions will be used, which are suggested in the International Standard Classification of Education (ISCED) and a definition given by Liveright at the first international conference on comparative adult education in Exeter.

The ISCED definition of adult educational reads as follows:
"organised programmes of education provided for the benefit
of and adopted to the needs of persons not enrolled in regular
school, college or university and older than fifteen".
Education is taken to mean "organised and sustained instruction
designed to communicate a combination of knowledge, skills
and understanding valuable for all the activities of life".

<sup>2)</sup> Liveright: Exeter-papers 1966.



<sup>1)</sup> ISCED III: Provisional Guide to the Collection and Analysis of Adult Education Statistics, UNESCO, Paris, 1972.

Liveright's definition of adult education is:

"adult-education is a process whereby a person who no longer attends school on a regular and full-time basis undertakes sequential and organised activities with the conscious intention of bringing about changes in information, knowledge understanding or skills, appreciation and attitudes, or for the purpose of identifying and solving personal of community problems".

If we use these both definitions, then people who are enrolled in regular school, college or university on a full-time basis are excluded, as well as those who get full-time initial training as an employee.

The definitions cover both vocational and non-vocational education. However it is not always easy to make a clear distinction between them. For instance, if someone takes a correspondence course to learn German language, one cannot make out weth the is doing this as a part of his career, or as a leisure activity, unless one asks him, which was not possible in preparing this paper. This is the reason why the distinctions between vocational and non-vocational education, used in this paper, are based on the content of the courses given and/or the type of course-providing institutions.

The definitions of adult education, which are used in the Netherlands, are not different from the above mentioned definitions and will therefore not be used in this paper.

# II. Vocational Training

According to the resources involved and the numbers of students participating, vocational education and training is the most important part of adult education.

In spite of this fact, there are nearly no statistics about this subject. The Netherlands Central Bureau of Statistics (CBS) carries out an annual complete survey, called "The Dutch youth and their education", giving also figures about part-time education at evening-schools, youth in apprenticeship-schemes and retraining of unemployed. But only as far as these types of education are state-aided.

<sup>1)</sup> See among others: H.H. Frese, in: Permanent Education, Council of Europe, Strasbourg, 1970

Another CBS-statictic covers correspondence-education, with the restriction, that only figures are given of institutions that have been agreed by the Inspection Correspondence Education (RISO). For the rest, i.e. for as majority of courses in the field of vocational adult education, there are no statistics at all.

The figures presented in table 1 have to a large extent been gathered by traveling around in the Netherlands, interviewing numerous people, searching in archives etc.

To emphasize that the numbers and percentages in this paper are only estimates, all figures in the tables are presented with a margin of 10 %.



Estimates of total number of workers, receiving vocational education or training in 1971 Table 1

## Part-time education (evening-schools)  ### Part-time education (evening-schools)  #### Part-time education (evening-schools)  ###################################			The state of the s	
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training of national and local  government employees training in the armed forces  yocational training in industry  correspondence education  Total  4,700 - 48.300   35.920 - 39.700   7.780 - 30 - 5.800   4.830 - 5.260   30 - 5.800   5.710 - 6.290   90 - 5.800   323.380 - 357.420   28.120 - 30 - 5.800   323.380 - 357.420   5.430 - 6.800   55.430 - 6.800   55.430 - 6.800   171.590 - 189.680   171.590 - 189.680   171.590 - 149.680   171.590 - 1		19.000 -	1	i
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training in the armed forces  police  yocational training in industry  correspondence education  Total  Total  4.830 - 5.300  4.770 - 5.260  5.710 - 6.290  90 - 1  527.020 - 388.500  325.380 - 357.420  227.020 - 250.930  718.200 - 795.780  718.200 - 795.780  718.200 - 795.780		2	ŧ	ı
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vocational training in industry       351.500 - 388.500       323.380 - 357.420       28.120 - 31.         correspondence education       227.020 - 250.930       171.590 - 189.680       55.430 - 61.         Total       853.740 - 943.610       718.200 - 793.780       135.540 - 149.	· police			}
Vocational training in industry       351.500 - 388.500       323.380 - 357.420       28.120 -         correspondence education       227.020 - 250.930       171.590 - 189.680       55.430 -         Total       853.740 - 943.610       718.200 - 793.780       135.540 - 1		ı	ı	•
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853.740 -943.610 718.200 -793.780				
	Total	853.740 -943.610	718.200 -793.780	135.540 - 149.830

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Provisions for part-time education consist of evening-schools for second level and third-level (non-university) vocational education. The curriculum and certificates are equivalent to those of formal full-time education. Since 1968 there has been a decline in the volume of the second-level lower-stage education (25% compared to 1971), while for the second-level higher-stage there was an increase of 11% and for the third-level an increase of 66%

The apprenticeshipscheme deals with pupils, who are already a part of the working population and receive a complem ntary theoretical training. The figure shows since 1968 a declining tendency, which may be emplained by the fact that more and more pupils continue their full-time education over a larger period than in the past.

For the training of national and local government employees there are no statistics available. As a result the figures in table 1 are an estimate based on the percentage of industrial employees taking a vocational course provided by the employer.

With training of teachers is meant the training of those who are going to teach at primary and secondary schools. The figures refer to those who get t in training at part-time third-level non-university colleges. Besides those attending these part-time eveningschools about 30.000 students follow an equivalent education by means of correspondence courses. Furthermore about 2000 are enrolled in part-time university education. Thus the total number for teachers' training is about 74.000.

Retraining programmes for the unemployed care under the Department of Social Affairs and consist of job-training, such as carpenting work, bricklaying, fitter's work etc.

<sup>4)</sup> See table 3., which gives an estimate of the volume of several types of correspondence education.



<sup>1)</sup> CBS: op. cit.

<sup>2)</sup> See text page nr. 9 about G.I.T.P.-rapport

<sup>3)</sup> C.B.S. op. cit.

As mentioned above, the bulk of part-time university education consists of teacher training for secondary schools, however more and more universities are starting with evening- and weekend-courses, equivalent to full-time university education.

In 1972 a committee for post-graduate education was set up by the Academic Council to determine the future volume and costs of post-graduate education. As a starting point the Committee took the catagory of those who graduated more than three years before and who were not older than fifty years of age.

For 1973 the Committee estimated that there were 67.000 graduates in this catagory, one third of whom were expected to take post-graduate courses. For this 200 supplementary full-time toachers will be needed. Costs will be about f 300 a person a day.

The Armed Forces provide a wide variety of vocational education. In the figures given, compulsory service men are not included, because the training of these 50.000 men does not fit the definition of adult-education: they do not freely choose this kind of education. Vocational training in the 'Armed Forces can be divided roughly in three types.

First the colleges and courses run by Armed Services, which provide degree level and professional education for non commissioned officers and officers.

Second, the training of so called technical specialists, intended for voluntary service-men who have signed up for three to five years and who can obtain a technical education, provided by institutions outside the army (such as correspondence courses and polytechnics). As a consequence their certificates are also accepted when they return to civic employment. The number of these specialists is about 4300.

Third there are general education and remedial courses which are often a pre-requisite for promotion.

This type of education also takes place outside the army.

People are enrolled in evening schools, which are covered

by the part-time education system, or in correspondence courses.

The figure of 5000 in table 1 covers only military vocational

training provided by the Services, because the other mentioned



types of education are included in the figures of part-time education and correspondence education (both vocational and general). The total number of service-men receiving some training a year may be somewhere about 10.000. In the coming years this number will probably increase, because of the introduction of a renewed education and training system.

Concerning vocational education and training in industry, whether it is provided and/or payed for by employers or not, no statistics are available. Our research shows more than a hundred institutions which take care of a big variety of vocational courses, ranging in subject from highly specialised to more general courses, like sensitivity-training, and varying in length from 1 day till 3 years.

With regard to vocational training provided by the employer, in the autumn of 1973 the Committee for Increasing Productivity of the Social Economic Council started a research on retraining of adults, which is carried out by the G.I.T.P. The inventory stage of this research yielded the following results (see Table 2).

Table 2 Percentages of employees enrolled in employer-funded vocational courses.

Total employees in the sample	100 %
Participants in internal courses (november 1973)	7,3 - 8,1
Participants in external courses (november 1973)	6,9 - 7,7
Estimate of total percentage of employees enrolled in 1973	23,7 - 26,3
Male employees enrolled in 1973	21,8 - 24,2
Female employees enrolled in 1973	1,9 - 2,1

The percentages in table 2 are not fully applicable to all employees in industry because the sample consisted of all industries with more than 500 employees and a stratified sample of 15% of the concerns with 100 to 500 employees, which of course is only a part of the total working population in industry. Besides this, it was evident in the study that the more employees a concern has, the more courses and facilities are provided and the greater the percentage of employees taking a course.

Thus the percentage of all empkyees in industry enrolled in employer-funded courses will be much lower and may be about 15%. This figure covers also participants in vocational correspondence courses, which make out a great deal of adult education. The most recent survey of numbers of students enrolled in correspondence courses was made by the C.B.S. in 1970, in view of the preparation of the Correspondence Education Act, which passed in 1972. 1)

The number of enrolments then was about 200.000. In 1967 the difference between enrolments on the counting-date and the total number for 1966 was a factor varying from 1,1 to 1,7 regarding different courses. It seems fair to apply this also to the figure of 200.000 of 1970. Thus the total number of people involved in 1969 was probably 300.000. To convert this number into an estimate of the total number of participants in 1971, the developmental trend of part-time vocational education was used, with regard to the different levels of education. So in 1971 about 350.000 people were studying by correspondence.

Table 3 shows the breakdown of enrolments in 1971 by type of course.

<sup>1)</sup> J.B.S.: Statistiek van het Schriftelijk Onderwijs op 1 maart 1970.



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24	Type of course	total	Hen	Women
i H	Educational certificates a) secondary education			
	equivalent to full-time education) b) teacher mertificate for primary	30.470 - 33.670	21.630 - 23.910	8.840 - 9.750
	schools teacher centificate for	8.120 - 8.980	5.180 - 5.730	2.940 - 3.250
1	schools	20.560 - 22.730	13.120 - 14.510	7.440 - 8.220
II.	Trade and administration			
	a) accountancy courses	32.750 - 36.200	20.400 - 22.550	12.350 - 13.650
; !	b) other courses	65.100 - 71.950	40.560 - 44.830	24.540 - 27.120
III	III. Gouvernment agencies	1.270 - 1.410	1.040 - 1.160	230 - 250
IΥ	· Technics, agriculture, horticulture			
	a) technics	72.310 - 79.920	66.530 - 73.530	5.780 - 6.390
	b) agriculture and horticulture	4.240 - 4.680	3.963 - 4.310	340 - 370
	c) other vocational courses	16.860 - 18.640	15.510 - 17.150	1.350 - 1.490
Α.	General knowledge			
	a) mathematics, book-keeping, languages	33.510 - 37.040	23.790 _ 26.300	9.720 - 10.740
	b) other courses (recreational)	42.440 - 46.910	30.130 - 33.310	12.310 - 13.600
VI.	Management courses	5.810 - 6.420	5.350 - 5.910	460 - 510
	Total	333.440 - 368.550	247.140 -273.200	86.300 - 95.350
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The figures presented in table 3 are restricted to those institutes which are accredited by the Inspection for Correspondence Education or of which the examinations are supervised by the Ministry of Economic Affairs.

The number of enrolments in correspondence education in table 1 is different from the total number given in table 3. This is because the enrolments in secondary education courses and general education courses are left out of it. They will be mentioned in the chapter on non-vocational education.

In order to get some percentages of the working -population enrolled in vocational training table 4 shows the distribution of the working population.

Table 4 Distribution of the full-time Labour Force in 1971

	thousands
Employers and Self-employed	753
Employees in:	
agriculture and fishing	74
mining	19
industries	1.135
gas, electricity, water	43
construction	428
trades, catering	677
transport, communication	279
other misc.services	739
national government service	121
local government service	124
other corporations and government agencies	21
armed forces (excl. compulsory service-men)	55
police	18
public education	187
Unemployed	69
Total	4.742



When the data of table 4 are compared with those in table 1 then the following percentages are obtained. As far as possible table 5 shows a breakdown by type of occupation.

Table 5 Proportion of full-time workers undergoing vocational training in 1971

	percentages
Employers	† † † † † † † † † † † † † † † † † † †
Self-employed	17,3 - 19,1
Employees in industry	
National and local government employees	14,2 - 15,8
Teachers	38,0 - 42,0
Police	32,3 - 35,7
Armed Forces	17,1 - 18,9
Unemployed	3,3 - 3,7
average total	16,5 - 18,3

The percentage for workers in industry and the self-employed is relatively high. However one has to keep in mind that there is probably a big overlap between the figures for courses funded by employers and the figures for vocational correspondence courses. The real percentage will therefore be lower than mentioned in table 5 and may be somewhere about 15%. The percentage for employees of the national and local government naturally turns out to be the estimate of 15% based on the findings in the G.I.T.P. report.

In the percentage for the Armed Forces are included the number of servicemen getting a vocational training which is not provided by the Services themselves.

It is very likely that the proportion of servicemen getting a form of education in the Services itself will be higher, if the number of those enrolled ingeneral education courses are included.

The total percentage of full-time workers in vocational education and training includes multiple enrolments, and after correcting



for this, the percentage of the whole working population enrolled in a form of vocational education and training will be about 15 %.

# III. Non-vocational education

In the Netherlands the single term "education" embraces three different concepts and related practices. The first is "opvoeding", meaning upbringing and nurture, which is not important in this paper. The second meaning is "onderwijs", or schooling and instruction. Its institutional setting is the school and the university, or similar institutions. The third is "vormingswerk". Its covers part of what is known in England as "liberal" adult education, accentuating the affective aspects of personality formation and socialisation, rather than committive learning. So this chapter covers general education equivalent to schooleducation (provided by evening-schools and correspondence courses) as well as the educational work for (character)development, socialisation and culture education ("vormingswerk").

In 1971 the Netherlands Centre for Adult Education (NCVO) published a "map" of all provisions for adult education in the Netherlands 1). It gives a description of all the organisations, institutions, centres, etc., which are engaged in the field of adult education. However, almost no statistics are available. The only existing statistics are those mentioned before: the CBS-survey of Dutch Youth and their Education (1971) and the CBS statistics of correspondence education (1970). Besides these, the CBS in 1969 carried out a survey about the local social-cultural centres. From these statistics only the figures concerning courses were used. The other figures presented here are estimates, based on data gathered by own research. As pointed out before, the distinction between vocational and non-vocational education is not always easy to make. For also in vocational courses provided by employers more and more attention is paid to social skills, as essential to a good job fulfillment, especially for management jobs. So, like in the preceding chapter about vocational education, the content of the courses and the institutions which provide them are taken as a starting point.

Table 6 shows the institutions, with their respective numbers of participants.



<sup>1)</sup> NCVO: Kaart van het vormings- en ontwikkelingswerk met



Estimates of number of people participating in non-vocational education in 1971 Breakdown by type of education and type of institutions

	total	nen	мошеп
I. General education	over 1		
a) part-time education (evening-schools)	(S)		
- second level lower stage	7.360 - 8.140	4.940 - 5.460	2.420 - 2.680
- second level higher stage	7.580 - 8.380	5.670 - 6.270	1.910 - 2.110
b) correspondence education			
- second level courses	30.470 - 33.670	21.630 - 23.910	8.840 - 9.760
- general knowledge	33.510 - 37.040	23.790 - 26.300	9.720 - 10.740
- recreational courses	42.440 - 46.910	30.130 - 33.310	12.310 - 13.600
II. T.Vcourses (Teleac)	46.690 - 51.600		
III. "Liberal" adult education			· · · · · · · · · · · · · · · · · · ·
a) young workers educational institutes	43.560 - 48.140	17.810 - 19.690	25.750 - 28.450
b) local social-cultural centres	86.160 - 95.240	43.670 - 48.270	42.490 - 46.970
c) residential centres	152.000 - 168.000	1	1
d) local adult education	225.000 - 250.000	1	; ;
Total	654.770 - 747.120	360.170 - 410.920 <sup>1)</sup>	294.600 - 336,200 <sup>1)</sup>

1) rough estimates

The part-time evening-schools provide courses at the second level. The content of the courses and the certificates gotten are equivalent to those in full-time education. The figures presented here are probably a low estimate, because they cover only the state-aided evening schools. Besides these, there exists an unknown quantity of private evening-schools, from which the volume of enrolments is not known.

Since 1968 the evening-schools went through an enormous quantitative development. In 1971 the number of participants was more than doubled and it is still growing.

Hoksbergen says, that many of the ideas about permanent education, second-chance education, etc. are realised in today's evening-education. The way in which this type of adult education is developing makes it probably possible to turn it into a so called "open school" (cf. the British "open university"). He also develops ideas about cooperation of evening-education and correspondence education. 1)

The figures for correspondence education are extracted from Table 3 (Ia, Va,b). As stated before, the numbers cover only the enrolments in institutions, which are accredited by the Inspection for Correspondence Education. Especially in this field of general knowledge courses and recreational courses, there are many more institutions then those included in the C.B.S.-statistics. Thus also this number is probably a low estimate.

The Foundation Television Academy "Teleac" provides t.v. courses, which are mostly recreational, like English, Spanish, chess etc. The courses are supported by written information and sometimes by meetings. Teleac is also engaged in providing vocational courses, but it was not possible to separate these from the non-vocational courses.

Multi-media-projects do not occur very frequently in the Nether-lands.

<sup>1)</sup> Hoksbergen, R.A.C., in Intermediair, Vol. 10, 8, 1974 pp 31 - 35 and Intermediair, Vol 10, 9, 1971 pp 27 - 31.



In spite of the great number of broadcasting corporations and foundations with the aim of radio and t.v.-education, there is no permanent organisation for multi-media-projects.

It-is still not clear what to understand by educational broad-casting. At the one side there is the idea of "all programmes educate" and at the other the definition of the E.B.U.:
"Programmes aimed at leading the adult to a progressive mastery of a body of knowledge or skill in a defined field and which thus contribute to the development of the individual and to his better adaptation to a changing society". The E.B.U. says that "the attainment of this aim can normally best be achieved:

- 1) when the programmes are organised in series;
- 2) when during and after transmission the viewer and/of listener is encouraged to adopt a "participating" attitude towards the subject matter of the programmes;
- 3) when the programmes are reinforced by other teaching aids"
  Because it is not known which broadcasting corporation
  in the Netherlands has which idea about educational programmes
  it was not possible to get data about this.

Coming to the organisations and institutions which provide courses in the field of "liberal adult education" then table 6 shows only a minor part of it. Mostly they are promarely social, but often place a great emphasis on adult education as one of their main objectives.

Young workers' educational institutes provide part-time education for those young people who are no longer reached by the compulsory education and who do not attend full-time education. By means of an amendment to the Labour Act, the government forbids employment of persons younger than 16. Fifteen year-olds are only allowed to work if they are enrolled at least one day a week in part-time education and if that day will be paid for, by the employer.

In 1969 the C.B.S. carried out a survey on local social-cultural centres (club-houses, neighbourhood-centres, etc) 1)



<sup>1)</sup> C.B.S., Sociaal-culturele centra 1969.

These centres provide a wide range of activities, like recreational meetings, hobbies, sports, character development, educational courses, library-work, music, dance, theatre, religious-meetings and all kinds of social services. It appeared that in 1969 about 2,4 million people of all ages were involved in some or another way in the activities of these local centres. The figures in table 6 cover only the number of participants older than 15 and concerning only educational courses. About the growth of participation in these local activities nothing is known, but it is very likely that the number of participants has increased.

In the category of residential centres are included the centres of the Woodbrooker organisation, the Folk High Schools and other short-term educational centres.

The educational programmes of the residential centres of the trade unions are also included in this catagory. The figures are taken from a survey, which the MCVO is carrying out today concerning these residential educational centres.

The local adult education is to a large extent covered by the NVN-organisation and an overall organisation for local adult education (Landelijk Bureau voor Plaatselijk vormingswerk).

These organisations include the Society for Public Welfare (Maatschappij tot Mut van't Algemeen), the Union of the Dutch People's Universities (Bond van Mederlandse Volksuniversiteiten) and the Worker's Educational Association (MIVON). From these three organisations only some figures about the MIVON-activities were available. In 1970 the NIVON had about 37.000 members. The total of acitvities carried out was 7500 and the number of participants was about 175.000. About 40% of this number were participants attending courses provided by the NIVON. With regard to the number of participants in Folk Universities there is nothing known. In 1969 there were 72 Folk Universities which included 105 local units.

The NCVO estimated a participation of about 250.000 people in local adult education.



Besides the above mentioned organisations there are a lot of organisations more, which provide non-vocational education. A large part of their activities can not be classified as "organised programmes of instruction", but a systematic course of lectures may be as educational as an evening-class.

An example: there are about 25 women's organisations, with a total membership of over 500.000, which also provide cultural and educational courses.

The total number of participants in non-vocational education as presented in table 6 is thus a low estimate and will probably be somewhere about 750.000 (including multiple enrolments).

## IV. Total participation in adult education

The estimates given in this paper are to a large extent very approximate. If they are added together there also rises a problem of double-counting, which we met before in several cases. During one year for instance the same person may be enrolled in a correspondence course, gets some on-the-job training and attends a series of lectures in a local social centre. As a consequence he will be counted more than one time in this paper. Therefore an estimate of total participation in adult education and training must be very approximate.

Table 7 summarises the estimates so far given in this paper. If we include all forms of vocational and non-vocational adult education and training, it brings us to a total of about 1,5 million adults receiving education and training in 1971.

If we assume that about a quarter of the students enrolled in correspondence education take more than one course and a quarter of them is included in the training in industry, and if we subtract a third or even half of the number in "liberal" adult education to avoid double-counting, we are left with a probably total of some 1,2 million of adults, participating in adult education and training in 1971.



<u>Table 7</u> Estimated total participation in adult education and training in 1971

Type of education or training	thousands
I. Vocational education and training	
a) provided by government	202 - 223
b) training in industry	
(incl. governmental bodies)	406 - 450
c) vocational correspondence education	227 - 250
II. Non-vocational education	
a) provided by government	58 - 65
b) non-vocational corresp. education	106 - 118
c) TV-courses	47 - 52
d) "liberal" adult education	463 - 513
Total (incl. multiple enrolments)	1.509 - 1.671
Estimated total participation (excl. multiple enrolments)	1.150 - 1.250

Comparing this estimate of 1,2 million adults, taking part in organised education and training after their full-time education, with the total number of students enrolled in full-time education in 1971, it is about 35 %. It is also 9 % of the total population and about 12,5 % of the population of 15 years and older. It is interesting to see that only 7,5 % of the population of 15 years and older is receiving full-time education.

In 1973 the Foundation Television Academy Teleac charged Intomart-Hilversum with a survey concerning the interest for courses and education after full-time education. 1) Luckily enough we got the manuscript on approval during the writing of this paper. The research was carried out on a random sample of the population aged 15 years and older, and yielded the following results.



<sup>1)</sup> Stichting Teleac: Studeren na het dagonderwijs.

It appeared that about 35% had started with courses or training after they had finished full-time education. The number of respondents enrolled in a course on the moment of the interview was about 5%.

To see what this means in absolute numbers, which are of course estimates again, see table 8.

Table 8 Participation in adult education in 1973.

	percentages	volume in thousands
Total population aged 15 and over	95 - 105	9.400 - 10.400
Started with a course or training after finishing full-time education	33,5 - 37,0	3.317 - 3.663
Started with a course after full- time education and finished it	17,6 - 19,4	1.742 - 1.921
Still doing a course or training (juni 1973)	4,9 - 5,4	485 - 535
men women	3,2 - 3,5 1,7 - 1,9	317 - 347 168 - 188
Estimated total participation in adult education in 1973 1)  men  women	12,2 - 13,5 8,0 - 8,8 4,2 - 4,7	1.208 - 1.336 732 - 871 416 - 465

<sup>1)</sup> see text

adapted from: Teleac, op.cit.

The percentage of 35% which started with a course or training does not mean to say that all these people also finished it. According to the research it was only half of the number that finished a course once started with.

To get an estimate of the total volume enrolled in a course during 1973 we have to take into account the average length of the courses.



Because courses, especially vocational ones, vary from 1 week to 5 years, and because of the varying frequency of the short courses, it seems to be fair to multiply the number of participants with a factor 2,5. This brings us to a total number of about 1.250.000, participating in adult-education, which is about '2% of the total population aged 15 and over. If we compare these numbers with the findings in this paper, it appears to be equal. This would mean that there is no incomase in adult-education participation from 1971 till now. But the figures for part-time education and some verbal information about correspondence education institutions do show a steady incomase in the enrolments since 1971. The fact that the results of this survey seem to be an underestimate may be explained by the following:

First, the interviews in the Teleac-Intomart-enquiry were not confined to questions about participation in adult-education. Because the survey was carried out by a commercial market-research institute the interviews were a mixture of questions about several subjects. This may decrease the reliability of the answers.

Second, it seems very probable that people in the first place think of vocational education and training and some forms of general education when questioned about participating in a course after their full-time education.

As a consequence the enrolments in courses provided by socialcultural organisations, like residential centres, People's Universities, etc., will be less represented in this survey.

The figures in this paper show, that this type of adult-education is almost a quarter of the total amount.

So we may conclude that the total participation in adult-education and training in 1973 is about 1,5 million, which is approximately 11% of the total population and 15% of the population aged 15 and over.

In 1969 the Ministry of Culture, Recreation and Social Work commissioned the NCVO and the IWA (Institute for the study of adult education and planned change) to carry out an inquiry into



"Motivation and orientation in learning of adults in the .... Netherlands". 1) The findings in the report about this inquiry, from which we only use the data about participation in adult education, are rather different from those in the Teleac-report. For the category of people, who participated once or more than in some type of adult education, Van Enckevort and Doerbecker found a figure of 68%. This seems to be rather high, in comparison with the findings in this paper and in the Telescreport. But one has to keep in mind that, first, the research was carried out with a sample of the population of 21 years and older, which sample was not wholly representative for this populationgroup, and second, the figures include also participation in discussion-groups and attending lectures. As mentioned before, in this paper and in the Teleac-repot the findings refer to the population of 15 year and older, while the categories of discussion-groups, lectures, etc. are excluded. The reports are therefore not wholly comparable. Table 9 shows some figures from the NCVO-IWA-report, about participation in some types of adult education.

Table 9 Participation in adult education of the Population of 21 years and older in 1969 and earlier

percentages
37,2
- 23,1
22,8
34,6
16,3
14,6
•

adapted . from Van Enckevort, G., C. Doerbecker, op.cit.

<sup>1)</sup> Van Enckevort, G., C. Doerbecker, Leermotivaties en leerorientaties van volwassen Nederlanders, NCVO, Amersfoort, Vormingswerkcahier nr. 11.



## V. Different age-groups in adult education.

It is interesting to look at some other results from the Teleac-report. It appeared that almost 70% of the people doing a course on the interview-date were between 15 and 30 years old. Table 10 shows the breakdown in age-groups of the participants.

Table 10 Enrolments in adult education (june 1973)
Breakdown by ages.

Age-groups	percentages
15 - 29 years	65,5 - 72,5
30 - 39 years	17,6 - 19,4
40 - 49 years	3,2 - 3,6
50 - 64 years	5,4 - 6,0
65 years and older	3,2 - 3,6
Total	95 - 105 %

source: Teleac, op.cit., table 2.1.3.

From the report it is also apparent that the older generation not only participates less in current adult education, but they also did in the past, after leaving full-time education. Likewise they did receive less full-time education than the younger generation. This may partly be an explanation for the results in table 11, which shows that the more people received full-time education, the more they were (or still are) involved in education and training after their full-time education.

It shows that 75% of the people, who received less than 6 years of full-time education, never started with a course or training. The corresponding percentage for people, who received more than 11 years of full-time education, appears to be 32%.



Table 11 Enrolments in adult education after finishing full-time education (june 1973).

Breakdown by years of received full-time education.

(percentages)

	numbers of years full-time education to				total
Started with a course or training?	6 years or less	7 - 8 years	9 - 10 years	11 years or more	
Yes, still doing	1	3	7	15	6
Yes, not anymore	19	34	41	41	36
No, never started with	75	59	45	32	53
No answer	5	4	7	4	5
Total	100	100	100	100	100

source: Teleac, op.cit., table 2.2.1.

From these findings and from the fact that the younger generation tends to take a longer full-time education, we may conclude an increase in participation in adult education in the future.

# VI. Participation of women in adult education

As will be noticed, most of the tables presented so far are differentiated in numbers of men and women. The purpose is to get insight into the question wether adult education also functions as a second-chance education for women, and if adult education reduces the existing education gap between men and women. For that reason we return to table 1 and change the numbers into percentages.

Some figures in table 12 are quite reliable, because they are taken from the CBS statistics (a, b, d, e,). The other figures are more or less constructed by means of findings from the GITP-report (j), the proportion of male and female employees (g,h,i.) and the proportions in equivalent full- or part-time education (c, f, k.). This way of estimating is also applied in the tables 3, 6 and 13.



Table 12 Proportional distribution of men and women receiving vocational education and training in 1971

Type of education	men	women
a. part-time education (evening-schools) b. teacher training c. part-time university education d. apprenticeshipscheme e. retraining unemployed f. post-graduate education e. training of government employees h. training in the armed forces i. training in the police forces	73 - 81 61 - 67 61 - 67 87 - 96 95 -105 82 - 90 78 - 86 95 -103 94 -102	8 - 9  13 - 15 17 - 19 0 - 2 1 - 3
j. vocational training in industry k. correspondence education  Total	87 - 96 72 - 79 80 - 88	8 <b>-</b> 9 23 <b>-</b> 26 15 <b>-</b> 17

From the figures in table 12 it is evident that the teacher training has the greatest part of female participants, about 36%. Part-time university education has a similar distribution, because to a large extent it provides teacher training also.

Another remarkable percentage is that for vocational part-time education: 23%. Evenmore the proportion of female participants in this type of education is steadily increasing. From 1968 till 1971 the number of women in second level lower stage increased from 9 to 10%, in second level higher stage from 32 to 38%, and

in third level non-university from 28 to 32% (including teacher

training). But the average proportion of female participants in

vocational adult education and training appears to be rather low:

about 15 to 17% of the total volume. At the same time it is twice

as much as their participation in training in industry, which is

To get the distribution by sex for non-vocational adult education the numbers of table 6 are converted into percentages. These are showed in table 13.



only 8%.

Table 13 Proportion of male and female participants in non-vocational adult education in 1971. (percentages)

Type of education	men	women
<ul> <li>I. General education</li> <li>a) part-time education (evening-schools)</li> <li>- second level lower stage</li> <li>- second level higher stage</li> <li>b) correspondence education</li> </ul>	64 - 71 71 - 79 68 - 75	31 - 34 24 - 26 27 - 30
II. TV-courses	-	_
III. "Liberal" adult education  a) Young workers' educational institutes b) local social-cultural centres c) residential centres d) local adult education	39 - 43 48 - 53 -	56 <b>-</b> 62 47 <b>-</b> 52 <b>-</b>
Estimated total	52 - 58	43 - 47

In this table the figures are also for a deal reliable (I a and III a, b) and for a deal constructed (I b). The most remarkable figure here is the one concerning female participation in the young workers' educational institutes, about 60%.

The proportions in part-time non-vocational education are similar to those of part-time vocational education. About a quarter to a third of the people enrolled are women, and their percentage is still increasing. 1)

Finally it may be interesting to compare these findings with some other distributions by sex, as shown in table 14.

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Table 14 Several distributions by sex, regarding education and population in 1971. (percentages)

	men	women
vocational adult education vocational full-time education non-vocational adult education non-vocational full-time education total adult education total adult education total adult education in 1973 total full-time education working population	80 - 88 66 - 72 52 - 58 53 - 59 69 - 76 66 - 72 60 - 67 69 - 76	15 - 17 29 - 33 43 - 47 42 - 46 26 - 29 29 - 33 35 - 38 26 - 29

The participation of women in vocational adult education appears to be not only small in comparison with that in full-time vocational education, but also in comparison with other types of education. Also remarkable is the high proportion of women in non-vocational adult education, which is even greater than their participation in non-vocational full-time education. The figures for the total participation of women in adult education in 1971 and 1973 show a small increase from 28 to 31%.

#### VII. Costs of adult education

If it is difficult to obtain reasonable estimates about enrolments in adult education and training, it is nearly impossible to get them about the costs of adult education. Even the figures given by the CBS about government expenditure on education do not give any information about state-aided adult education. Thus also the following data have to be rough estimates.

In order to obtain the cost of part-time vocational education, students enrolled in evening-schools were counted as 25% of full-time students. This brings us to a total of about f 120 million for the evening-schools, including the teacher training. Likewise, the cost for a part-time student at the university tunns

Likewise, the cost for a part-time student at the university tunns out to be about f 4700. This would mean that total expenditure on



part-time university education in 1971 was about f 12 million. With regard to the apprenticeshipscheme the total cost in 1971 was about f 40 million. In 1974 about f 60 million will be spent on this.

The government expenditure on non-vocational part-time education in 1971 was about f 15 million. In 1974 about f 45 million will be spent on this type of adult education. From this it is evident that the government is attaching more and more importance to adult education, and that higher expenditure is not uniquely caused by the increasing enrolments in this type of education. The same tendency is shown by the more than doubled expenditure on the young workers' educational institutes, from f 70 million in 1971 to f 176 million in 1974.

There is no information about the cost of vocational training in industry. In line with the variations in duration of the courses from 1 day to 5 years, their costs vary from f 250 to f 5500. If we estimate the expenditure at about f 1000 per person, the total will be about f 375 million. This figure does not include the costs of earnings-forgone, for which there is no basis to make an estimate on.

The amount of f 50 million for education and training in the Armed Forces includes also costs for training of the compulsory servicemen, who make out about 50% of the total Forces. From this f 50 million about 65% is for vocational training. About 30% is spent on courses, which are not provided by the Services themselves and the remaining 5% is spent on courses in the field of general knowledge and cultural aducation. The total expenditure on education and training in the Armed Forces is about 0.8% of the total expenditure on defence.

With regard to the expenditure on correspondence education, there is no information available. But if the estimated number of annual enrolments is multiplied by typical fees, charged by some correspondence colleges, it would suggest about f 120 million for vocational courses and about f 55 million for general education courses in 1971.

Finally a rough estimate must be made of the empenditure on "liberal" adult education, like residential centres and other



types of of cultural education. Like for the other mentioned forms of adult education, also for this there is only little or no information available. Starting from some annual accounts of several Folk High Schools or equivalent institutions and taking into account the subsidy given by the government, we get an estimate of about f 70 million.

Table 15 summarises the estimates of expenditure for each type of education or training given in this paper.

It must be emphasised again that these estimates are extremely crude and represent no more than a basis for further enquiry.

Table 15 Estimates of expenditure for adult education and training in 1971.

Type of education	millions
T. State-aided adult education	
A) part-time education	
- vocational (incl. teacher training)	115 - 128
- non-vocational	15 - 15
b) partatime university education	11 - 12
c) apprenticoshipscheme	53 - 42
d) young workers! educational institutes	67 - 73
c) retraining unemployed	29 - 31
f) "liberal" adult education	67 - 75
II. Not state-mided adult education a) training in industry	750 - 390
b) training of government employees	22 - 24
c) training in the Armed Porces	47 - 53
d) training of Police	11 - 13
e) correspondence education	
- vocational	113 - 125
- non-vocational	53 - 59
Total	920 - 1.020

As shown in table 15 expenditure on all types of adult education and training in 1971 was probably about f 1000 million. In the figures given, the indirect costs, such as earnings-forgone, are not included. The calculation of the total costs for adult education belongs to the field of educational economy, which is rather underestimated as an academic discipline in the Notherlands. Unite there is only little known about the costs of formal education in this country, the study of costs of adult education has even not be started.

The only information we can give, is about the government expenditure on adult education, which consists of subsidies given to the types of adult education mentioned in table 15, I a - f.

Table 16 shows these figures for 1971 and 1974.

<u>Pable 16</u> Estimates of government expenditure on adult education and training. (millions)

Type of education	1971	1974
vocational adult oducation non-vocational adult education	200 - 220 103 - 113	255 <b>-</b> 281 243 <b>-</b> 269
Total.	303 - 333	498 - 550

In spite of the increased exponditure from 1971 to 1974, the government expenditure on adult education is still only 1% of the total government expenditure in 1974.

The disparity with formal full-time education becomes clear, if one knows that the government expenditure on formal full-time education is about 23% of the total government expenditure in 1974.

Movever, these findings are based on rather crude estimates. They raise a number of questions about the balance of resources between adult education and fermal full-time education.



#### References

Academische Raad.

Nadere aspecten van het postacademisch onderwijs. (Further aspects of post-graduate education.).
's-Gravenhage, 1973.

Centraal Bureau voor de Statistiek. (C.B.S.)

Statistick van het schriftelijk onderwijs op 1 maart 1967. (Statistics of correspondence education at march, 1th, 1967.).

C.B.S.

Statistick van het schriftelijk onderwijs op 1 maart 1970. (Statistics of correspondence education at march, 1th, 1970.). 's-Gravenhage, Staatsuitgeverij, 1973.

C.B.S.

Statistick van de uitgaven der overheid voor onderwijs 1970. (Statistics of government expenditure on education 1970.). 's-Gravenhage, Staatsuitgeverij, 1973.

C.B.S.

Sociaal-cuturele centra 1969. (Social-cultural centres 1969.). 's-Gravenhage, Staatsuitgeverij, 1970.

C.B.S.

De Nederlandse jeugd en haar onderwijs 1971 / '72. (The Netherlands youth and its education 1971 / '72.). 's-Gravenhage, Staatsuitgeverij, 1973.

C.B.S.

Statistisch Zakboek 1973. (Statistical Yearbook 1973.). 's-Gravenhage, Staatsuitgeverij, 1973.

Enckevort, G. van, en C. Doerbecker

Leermotivaties en leeroriëntaties van volwassen Nederlanders.
(Motivation and orientation in learning of adults in the Netherlands.).
Amersfoort, N.C.V.O., 1972.
Vormingswerkcahier nr. 11.

Frese, H.H.

Permanent Education, a strategy of social action, in: Permanent Education. Stasbourg, Council of Europe, 1970.



Gemeenschappelijk Instituut voor Toegepaste Psychologie (G.I.T.P.).

Onderzoek om- en bijscholing van volwassenen middels interne bedrijfsopleidingen. Verslag van de eerste inventariserende fase.

(Research on retraining of adults by means of internal training facilities. Report of the first inventory-stage.). Berg en Dal, G.I.T.P., 1973.

Hoksbergen, R.A.C.

Het avondonderwijs blijft groeien. (Evening education is still growing.). in: Intermediair, vol. 10 (1974), 8, 31 - 35.

Hoksbergen, R.A.C.

Van avondschool naar open school? (From eveningschool to open school?). in: Intermediair, vol. 10 (1974), 9, 27 - 31.

I.S.C.E.D.

International Standard Classification of Education, Part III: Provisional Guide to the Collection and Analysis of Adult Education Statistics. Paris, U.N.E.S.C.O., 1972.

Kallen, D.B.P., a.o.

Recurrent Education. Paris, O.E.C.D.-C.E.R.I., 1973.

Martens, A.

Nieuwe gids voor school en beroep 1973. (New guide for school and occupation 1973.). Haarlem, De Toorts, 1973.

Nederlands Vrouwen Comité (N.V.C.).

Onderzoeksverslag naar de vormingswerkzaamheden van de 20 bij het N.V.C. aangesloten organisaties. (Report on educational activities of the 20 associated women organisations.). Den Haag, Informatie en Dokumentatie Centrum van het N.V.C., 1970.

N.C.V.O.

Kaart van het vormings- en ontWikkelingswerk met volwassenen in Nederland. (Map of adult education in the Netherlands.).

Groningen, Wolters-Noordhoff, 1971.

Rijksbegroting voor het dienstjaar 1974 (Government-budget 1974.). 's-Gravenhage, Staatsuitgeverij, 1974.

TELEAC Studeren na het dagonderwijs.

(To study after full-time education.). Utrecht, Teleac, 1974.

Velde, J. van der.

De start van de experimenten "Education Permanente". (Starting experiments in Permanent Education.). Amersfoort, N.C.V.O., 1972. Vormingswerkcahier nr. 9.

Woodhall. M.

Adult Education and Training in the United Kingdom. Paris, O.E.C.D., DAS/EID/73-43.

# Institutions, from which data are obtained/used.

Goodrich-Vredestein, afd. Coördinatie Opleidingen. 's-Gravenhage.

Overzicht van externe bedrijfscursussen. (Survey of external training facilities). 1973.

Ministerie van Defensie. Koninklijke Landmacht. Commando Opleidingen. 's-Gravenhage.

Ministerie van Binnenlandse Zaken, Hoofafdeling Politie, Afdeling Onderwijs. 's-Gravenhage.

Nederlands Centrum voor Volksontwikkeling(N.C.V.O.) Amersfoort.

Planning van het vormingswerk in internaatsverband. -in uitvoering-. (Planning of the activities in residential centres. -in progress-.).

Nederlands Instituut Voor Efficiency (N.I.V.E.). 's-Gravenhage.

Documentatie van externe bedrijfsopleidingen. (Documentation on external training facilities.).

Eindhoven.

Philips, afd. Sociale Zaken. Documentatie en Evaluatie van Externe Opleidingen (D.E.E.O.). (Documentation and evaluation of external training facilities.).

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